

USPS Pricing Engine Web Services

December 20, 2019

Summary

This is the Domestic and International Pricing Engine Web Services (version 11.8.0.0) for the January 2020 Release. The following is a list of enhancements included in this release .

- B-379955 Add Cremated Remains requirements to Price Engine - Implement
- B-383700 BNS 1334 - Jan 2020 PC Enhanced Tracking - USPS Price Calculator Changes
- B-382733 BNS 1334 - Jan 2020 PC Enhanced Tracking - Business Calculator Changes
- B-383653 BNS 1334 - Jan 2020 PC Enhanced Tracking - Library Changes
- B-383654 BNS 1334 - Jan 2020 PC Enhanced Tracking - Database Changes
- B-383655 BNS 1334 - Jan 2020 PC Enhanced Tracking -Create Client Maps
 - Exclude 18B6, 022B6, 022P6, 022R6
- B374269 BNS 1309 - Jan 2020 PC - INTL Country Changes and/or Country Name Changes - South Sudan
- B-384313 Price Engine Mailing Date Error Message - Implement
- B-385157 BNS 1349 - Jan 2020 PC - PRC Remand FC Prices - Updated RCalc SQLs from Pricing Tool
- B-390583 - BNS 1314 - Jan 2020 PC - Change Services to Return 2 Decimal Places Instead of 5 for Prices

BNS 1314 – Jan 2020 PC - Give a SKU Get a Price

The price engine is providing a new method to identify products using a SKU, aka Stock-Keeping Unit. This interface allows the caller to specify a specific product or group of products using a 15 digit key. This capability is available for domestic and international prices. See the USPS SKU User's Guide at: <https://pe.usps.com/resources/PriceChange/January%202020%20-%20USPS%20SKU%20User%20Guide.pdf>.

GetPriceBySKU will be the replacement for the **GetMailingFees** method. **GetMailingFees** is being deprecated. If you use **GetMailingFees**, then you need to learn how to update your product to use **GetPriceBySKU**.

```
public class SKURequest
{
    public SKURequest();
    public IDCard IDCard { get; }
    public string SKU { get; set; }
    public DateTime ShippingDateTime { get; set; }
```

}

IDCard – Not required field

- **SKU Definition**

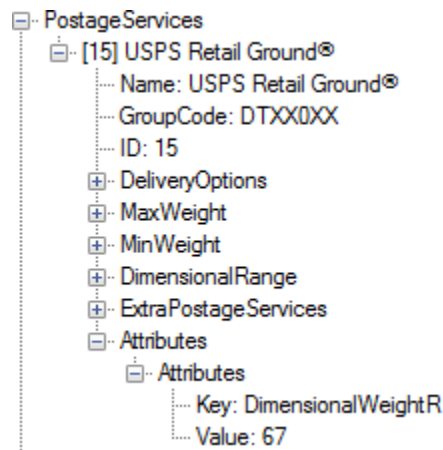
- 15 Digit Max, 3 Digit Minimum
- % - Wildcard represent any character
- Each digit in the SKU corresponds to a product/service
- Ex: ICCN%%X%%%

BNS 1364 – Jan 2020 PC – Add Dimensional Weight to USPS Retail Ground

USPS Retail Ground is now using dimensional weighting to all zones. USPS Retail Ground Parcels that exceed one cubic foot (1,728 cubic inches) are charged based on the actual weight or the dimensional weight, whichever is greater, in all zones (Local, 1-9). The dimensional weight divisor will be 166 for all zones. Oversize pricing remains for USPS Retail Ground parcels (for parcels that measure in combined length and girth more than 108 inches but not more than 130 inches, use the oversized price, regardless of weight, based on the applicable zone.) Balloon rates have been removed.

LOR is not impacted.

You can determine if pricing was determined by dimensional weighting by checking the DimensionalWeightR key in the Attributes node as shown below:



Remove Price Engine Hosted Service Commitments functionality

The price engine is removing its own service commitment functional. It was a backup capability used if SDC was not available. We will rely on SDC solely for this functionality moving forward. The price engine will report estimated delivery dates as ranges if SDC is not available. The following table specifies what will be reported for each mail service:

Mail Service	Estimated Delivery times reported when SDC is not available
PM	1 to 3 Days

FCM	1 to 3 Days
Package Services	2 to 8 Days
Standard Mail	2 to 8 Days
Periodicals	2 to 8 Days

D-43362 - Country Information does not show PMI when the Country is Canada

This corrects a current bug in production where PMI does not show for Canada. After this release PMI will be available for Canada.

Deprecated Method

The method **GetMailingFees** will be deprecated and no longer updated. As stated above it is highly recommended current users of this call switch to **GetPriceBySKU**.

Changes to the Database Structure

New databases are created to support domestic and international logic and prices. These databases are named USPS_DOM_2020_01 and USPS_INTL_2020_01 respectively. There is now only one pricing table to represent SKUs.

Updated version number and sign all DLLs

All the libraries have been update to version 11.8.0.0 and re-signed.

Updated databases

New databases have been created for this release: USPS_DOM_2020_01 and USPS_INTL_2020_01 for domestic and international respectively. With SKU Pricing the pricing tables have been replaced by a single pricing table this is SKU based. Additionally, the service commitments and exceptions tables (dm_service_commitments and dm_pm_sc_exceptions respectively) are replaced by a new service commitment table (ServiceCommitments).

Impact on Existing Applications

WSDLs have not been update; you should not have to rebuild your applications.

Reported Defects and Change Request

Title	Status
BNS 1334 - Jan 2020 PC Enhanced Tracking	Completed
D-45398, D-45475 - BNS 1314 - Jan 2020 PC - Signature Confirmation price amount 0.00	Completed
D-45501 - BNS 1314 - Jan 2020 PC - GetServicesWithPricing Returns THREE PostagePrices: O, R, and R	Completed
D-45719 - PM Regional Rate Boxes Prices are Incorrect.sql	Completed
D-45937 - BNS 1314 - Jan 2020 PC - Extra Service Error (Certificate of Mailing Bulk)	Completed
D-45935 - BNS 1314 - Jan 2020 PC - FCMI Flats Return No Charge	Completed

D-46010 - BNS 1314 - Jan 2020 PC - PostCalc FCMI Postcards No Charge	Completed
D-46011 - BNS 1314 - Jan 2020 PC - No PMI Flat Rate Boxes for Canada	Completed
D-46012 - BNS 1314 - Jan 2020 PC - 0.5 lb Returns 1 lb GXG Price	Completed
D-46015 - BNS 1314 - Jan 2020 PC - PMEI .5 lb Returns 1 lb Price	Completed
D-46016 - BNS 1314 - Jan 2020 PC - Canada PMEI Comm Plus Zone 2 No Price	Completed
D-46017 - BNS 1314 - Jan 2020 PC - IPA Parcels No Prices	Completed
D-46024 - BNS 1314 - Jan 2020 PC - Domestic PM APO Flat Rate Box Price Incorrect	Completed
D-46026 - BNS 1314 - Jan 2020 PC - Dom FCM-Letters, Questionable Nonautomation Prices	Completed
D-46038 - BNS 1314 - Jan 2020 PC - EDDM Flats Returns 0.00 over 4 oz.	Completed
D-46042 - BNS 1314 - Jan 2020 PC - Dom Parcel Return Svc Machinable Balloon & Oversized Pricing	Completed
D-46089 - BNS 1314 - Jan 2020 PC - Intl Insurance Not Returning Initial Price	Completed
D-46090 - BNS 1314 - Jan 2020 PC - Canada PMI DVD Flat Rate Box Price	Completed
D-46220 - BNS 1314 - Jan 2020 PC - Incorrect FCM Metered Letter Price	Completed
D-46232 - BNS 1314 - Jan 2020 PC - ECOMPRO DVD Flat Rate Box	Completed
D-46238 - BNS 1314 - Jan 2020 PC - Canada ECOMPRO PMI Zone 2 Prices	Completed
D-46243 - BNS 1314 - Jan 2020 PC - Standardize Solution for Intl Insurance Not Returning Initial Price	Completed
D-46329 - BNS 1314 - Jan 2020 PC - Bulk Insurance Not Returning a Price	Completed
D-46374 - BNS 1314 - Jan 2020 PC - Dom Comm BPM Decimal Precision > 2	Completed

BNS 1334 - Jan 2020 PC Enhanced Tracking

Two new Extra Services have been added to support Enhance Tracking.

ID	Description
181	Scan Retention
182	Scan + Signature Retention

This 2 Extra Services work similar to variable Extra Service where the number of months will be specified as an Additional Input Value with the tag of "rtp". The following table defines the valid values:

Extra Service	Description	Value
Scan Retention	6 Months	0.5
	1 Year	1
	3 Years	3
	5 Years	5
	7 Years	7
	10 Years	10

Scan + Signature Retention	3 Years	3
	5 Years	5
	7 Years	7
	10 Years	10

The following error message will be returned:

Extra Service	Error Code	Message
Scan Retention	50082	Warning - The Retention Period can only be 0.5, 1, 3, 5, 7 or 10
Scan + Signature Retention	50082	Warning - The Retention Period can only be 3, 5, 7 or 10

BNS 1314 - Jan 2020 PC - Signature Confirmation price amount 0.00

The SKUs were incorrect for flat rate products.

BNS 1314 - Jan 2020 PC - GetServicesWithPricing Returns THREE PostagePrices: O, R, and R

The SKUs have been corrected.

BNS 1314 - Jan 2020 PC - PM Regional Rate Box A & B Prices for Incorrect Zone

The SKUs have been corrected.

BNS 1314 - Jan 2020 PC - Change Services to Return 2 Decimal Places Instead of 5 for Prices

Code change to reduce decimal places.

D-45398, D-45475 - BNS 1314 - Jan 2020 PC - Signature Confirmation price amount 0.00

Updated the SKU.

D-45501 - BNS 1314 - Jan 2020 PC - GetServicesWithPricing Returns THREE PostagePrices: O, R, and R

Updated the SKU.

D-45719 - BNS 1314 - Jan 2020 PC - PM Regional Rate Box A & B Prices for Incorrect Zone

Updated the SKU.

D-45935 - BNS 1314 - Jan 2020 PC - FCMI Flats Return No Charge

Corrected SKU-based pricing logic.

D-46010 - BNS 1314 - Jan 2020 PC - PostCalc FCMI Postcards No Charge

Database change to the SKU for the calculator element from group 2 to group 3.

D-46011 - BNS 1314 - Jan 2020 PC - No PMI Flat Rate Boxes for Canada

Corrected code. This issues also effected PMI flat rate envelopes.

D-46012 - BNS 1314 - Jan 2020 PC - 0.5 lb Returns 1 lb GXG Price

Updated code to allow .5 as a weight break.

D-46015 - BNS 1314 - Jan 2020 PC - PMEI .5 lb Returns 1 lb Price

Updated code to allow .5 lbs.

D-46016 - BNS 1314 - Jan 2020 PC - Canada PMEI Comm Plus Zone 2 No Price

Corrected SKU logic.

D-46017 - BNS 1314 - Jan 2020 PC - IPA Parcels No Prices

Updated SKU in the Calculator Elements table from 40 lbs. to 44 lbs.

**D-46024 - BNS 1314 - Jan 2020 PC - Domestic PM APO Flat Rate Box Price
Incorrect**

Update SKUs in the database to the correct value.

**D-46026 - BNS 1314 - Jan 2020 PC - Dom FCM-Letters, Questionable
Nonautomation Prices**

Added a conditional to the first-class mail class to check if the SKU based pricing is being used.
If it is don't add the non-machinable surcharge.

D-46038 - BNS 1314 - Jan 2020 PC - EDDM Flats Returns 0.00 over 4 oz.

Corrected weight limit from 16 oz. to less than 16 oz.

**D-46042 - BNS 1314 - Jan 2020 PC - Dom Parcel Return Svc Machinable
Balloon & Oversized Pricing**

Corrected the 'DS' keys in the database.

D-46089 - BNS 1314 - Jan 2020 PC - Intl Insurance Not Returning Initial Price

Updated code to properly set the initial price when the declared value is zero.

D-46090 - BNS 1314 - Jan 2020 PC - Canada PMI DVD Flat Rate Box Price

Updated the SKU.

D-46220 - BNS 1314 - Jan 2020 PC - Incorrect FCM Metered Letter Price

Updated the SKU.

D-46232 - BNS 1314 - Jan 2020 PC - ECOMPRO DVD Flat Rate Box

Updated the SKU.

D-46238 - BNS 1314 - Jan 2020 PC - Canada ECOMPRO PMI Zone 2 Prices

SQL to add in zone 2 SKUs.

D-46243 - BNS 1314 - Jan 2020 PC - Standardize Solution for Intl Insurance Not Returning Initial Price

Added logic to handle insurances.

D-46329 - BNS 1314 - Jan 2020 PC - Bulk Insurance Not Returning a Price

Updated the SKU.

D-46374 - BNS 1314 - Jan 2020 PC - Dom Comm BPM Decimal Precision > 2

Created SQL script to set the display format to two decimal places.